

WHAT IS CLAIMED IS:

1. A liquid crystal display, comprising:
 - a first thin film transistor formed in a picture display part together with liquid crystal cells each provided at each crossing area of a plurality of signal lines for driving each of the liquid crystal cells;
 - a second thin film transistor included in a drive circuit that generates a drive signal to drive the signal lines and formed in a drive circuit part located at the outer area of the picture display part; and
 - a gate insulating film formed between an active layer and each gate electrode included in each of the first and second thin film transistors, and having a structure of at least two-layers, inclusive of an etch-stopper layer,and
 - wherein the gate insulating films of the first and second thin film transistors are formed to have different thickness from each other.
2. The liquid crystal display according to claim 1, wherein the gate insulating film of the first thin film transistor is formed to be thicker than the gate insulating film formed between the active layer and the gate electrode of the second thin film transistor.
3. The liquid crystal display according to claim 1, wherein the gate insulating film of the first thin film transistor has a structure of three layers, the middle layer of which is the etch-stopper layer.
4. The liquid crystal display according to claim 3, wherein the gate insulating film of the second thin film transistor has a structure of two layers, the uppermost layer of which is the etch-stopper layer.
5. The liquid crystal display device according to claim/wherein the gate insulting film of the second thin film transistor has a structure of two layers, the uppermost

layer of which is the etch-stopper.

6. The liquid crystal display according to claim 1, wherein the response times of the first and second thin film transistors are different because of thickness of the gate insulating film.

7. The liquid crystal display according to claim 1, wherein the etch-stopper layer includes silicon nitride SiNx.

8. The liquid crystal display according to claim 1, wherein the uppermost layer and the lowermost layer of the gate insulating film of the first thin film transistor and the lowermost layer of the gate insulating film of the second thin film transistor include silicon dioxide SiO₂.

9. A method of fabricating a liquid crystal display having a first thin film transistor formed in a picture display part together with liquid crystal cells provided at each crossing area of a plurality of signal lines for driving each of the liquid crystal cells, and a second thin film transistor included in a drive circuit that generate a drive signal for driving the signal lines and formed at in a drive circuit part located at the outer part of the picture display part, the method, comprising:

forming a gate insulating film between an active layer and each gate electrode included in each of the first and second thin film transistors, wherein the gate insulating film has a structure of at least two-layers, inclusive of an etch-stopper layer, and the gate insulating films of the first and second thin film transistors have different thickness from each other.

10. The method according to claim 9, further comprising:
forming a buffer film of the first and second thin film transistors on a substrate;
forming an active layer of the first and second thin film transistors on the buffer film;
forming a gate electrode of each of the first and second thin film transistors on the gate insulating film;

forming a go-between insulating film of the first and second thin film transistors on the gate insulating film provided with the gate electrode;

forming a source electrode and a drain electrode of each of the first and second thin film transistors on the go-between insulating film;

forming a protective film of the first and second thin film transistors; and

forming a pixel electrode connected to the drain electrode of the first thin film transistor.

11. The method according to claim 9, wherein the gate insulating film of the first thin film transistor has a structure of three layers, the middle layer of which is the etch-stopper layer.

12. The method according to claim 11, wherein the gate insulating film of the second thin film transistor has a structure of two layers, the uppermost layer of which is the etch-stopper layer.

13. The method according to claim 9, wherein the gate insulating film of the second thin film transistor has a structure of two layers, the uppermost layer of which is the etch-stopper layer.

14. The fabricating method according to claim 9, wherein the etch-stopper layer includes silicon nitride SiN_x.

15. The fabricating method according to claim 9, wherein the uppermost layer and the lowermost layer of the gate insulating film of the first thin film transistor and the lowermost layer of the gate insulating film of the second thin film transistor include silicon dioxide SiO₂.